

White paper  
May 2010

# Sony Ericsson Zyló™ W20i, W20



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# Purpose of this document

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Sony Ericsson product White papers are intended to give an overview of a product and provide details in relevant areas of technology.

## Document history

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Version		
April 2010	First released version	Version 1
May 2010	Second released version	Version 2

## Sony Ericsson Developer World

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# Table of contents

<b>Product overview .....</b>	<b>4</b>
Sony Ericsson Zylo™ – Moonwalk to work .....	4
Facts – dimensions, weight, performance and networks .....	5
Full feature list – categorised list of features .....	7
<b>Technologies in detail .....</b>	<b>9</b>
Device-to-device communications (local) .....	9
Bluetooth™ wireless technology .....	9
Java™ .....	10
Messaging .....	11
Provisioning (OMA CP, OMA DM) .....	12
Synchronisation (OMA DS, EAS) .....	12
Multimedia (audio and video) .....	13
Web browser .....	14
Trademarks and acknowledgements .....	15

# Product overview

## Sony Ericsson Zylo™ – Moonwalk to work

Breakdance at the bus stop. Rap in the rain. Let loose. Show your true music style with all your pop icons and hip hop legends on Sony Ericsson Zylo™ phone. Rich bass beats. Enhanced stereo sound. Cool styles for the Walkman™ player. Ready to rock? Pop in the earbuds, blast the music and spread some good vibes.

### Find the band in the fitting room

Amazing voice. From the speaker in the fitting room. On the radio. Who is it? Get the answer with the TrackID™ application. Record and send to receive. Artist, title, album. Want it? Check out the PlayNow™ service\* online. Or play more of the music you already have. Choose artist, album or genre, and Sony Ericsson Zylo™ phone creates the playlist for you.

### Nothing to do? Tweet about it

Share the fun, the ordinary and the utterly boring. On Facebook™\* or Twitter™\*. Watch crazy corny classic clips on YouTube™. With friends in the mall or a stranger on the train. On the 2.6" large screen. Love to freeze moments? Dive into the unknown with camera and Google Maps™. Discover. Shoot. Then post the past in artistic stills on Picasa™ and Flickr®.

### Make a music call

Bought a song? Dying to share it? Call someone. Play it in the background. Sing along. Or choose a background sound for a prank call. Traffic noise. Office sounds. Still at work? Sure. Then hang up and play Music Genie to your own music. Fight a friend. Move your feet. And dance your way to victory.



\* This service may not be available in all markets.

## Facts – dimensions, weight, performance and networks

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<b>Size</b>	103 x 52 x 11.5 (16) mm
<b>Weight</b>	115 grams
<b>Available colours</b>	Jazz Black Chacha Silver Swing Pink
<b>Main screen</b>	
Colours	262,144 color TFT
Resolution	240x320 pixels
Size (diagonal)	2.6 inches
<b>Input mechanisms</b>	
Text input	Zi
Motion sensor	Accelerometer
<b>Memory</b>	
Phone memory	Up to 260 MB
Memory card support	microSD™, up to 16 GB
<b>Networks</b>	
W20i	UMTS HSPA 900 (Band VIII), 2100 (Band I) GSM GPRS/EDGE 850, 900, 1800, 1900
W20	UMTS HSPA 2100 (Band I) GSM GPRS/EDGE 850, 900, 1800, 1900
<b>Data transfer speeds</b>	
GSM GPRS (Class 10 CS4)	Up to 80 kbps (download). Up to 40 kbps (upload)
GSM EDGE (Class 10 MCS9)	Up to 247 kbps (download). Up to 123 kbps (upload)
UMTS HSPA (cat. 5 upload)	Up to 2.0 Mbps
UMTS HSPA (cat. 8 download)	Up to 7.3 Mbps
<b>Talk time (GSM)</b>	4 hours *
<b>Standby time (GSM)</b>	339 hours *

\* According to GSM Association Battery Life Measurement Technique.







<b>Talk time (UMTS)</b>	3 hours 30 min *
<b>Standby time (UMTS)</b>	403 hours *

<b>Video call time</b>	Up to 2 hours **
<b>Music listening time</b>	Up to 26 hours **
<b>Battery</b>	920 mAh

*\* According to GSM Association Battery Life Measurement Technique.*

*\*\* Battery performance may vary depending on network conditions and configuration, and phone usage.*

## Full feature list – categorised list of features

 <p><b>Camera</b>  3.2 megapixel camera  2x digital zoom  Geo tagging  Photo feeds  Photo fix  Send to web (photos and videos)  Video recording</p>	 <p><b>Music</b>  Album art  Automatic playlist creation  Bluetooth™ stereo (A2DP)  Clear bass  Clear stereo  PlayNow™ service*  SensMe™ application  Shake control  TrackID™ application  Walkman™ music player  Walkman™ styles</p>	 <p><b>Web</b>  Access NetFront™ Web browser  Bookmarks  Google™ search  Mouse pointer  HTML 4.01  XHTML 1.1  Web feeds</p>
 <p><b>Communication</b>  Call list  Conference calls  Polyphonic ringtones  Speakerphone  Vibrating alert  Video calling (main camera)</p>	 <p><b>Messaging</b>  Conversations  Email  Microsoft® Exchange Active-Sync®  Instant messaging  Picture messaging (MMS)  Predictive text input  Sound recorder  Text messaging (SMS)  Unified messaging</p>	 <p><b>Design</b>  Activity menu key  Auto rotate  Gesture control  Navigation key  Picture wallpaper  Wallpaper animation</p>

\* This service is not available in all markets.



### Entertainment

3D games  
 Facebook™ application\*  
 FM radio with RDS  
 Java™  
 Media browser  
 Music Call  
 Music Genie  
 Twitter™ application\*  
 Video streaming  
 Video viewing  
 WalkMate  
 YouTube™\*



### Organiser

Alarm clock  
 Calculator  
 Calendar  
 Flight mode  
 Notes  
 Phone book  
 Stopwatch  
 Tasks  
 Timer



### Connectivity

Bluetooth™ technology  
 Google Maps™  
 Modem  
 Synchronisation  
 USB mass storage  
 USB High speed 2.0 support

\* This service is not available in all markets.



# Technologies in detail

**NOTE:** The information outlined below is general and levels of compliance to standards and specifications may vary between products and markets. For more information, contact Sony Ericsson Developers World or your Sony Ericsson contact person where applicable.

## Device-to-device communications (local)

### Bluetooth™ wireless technology

Bluetooth™ profiles supported	Advanced Audio Distribution Profile Audio/Video Remote Control Profile Basic Imaging Profile Dial-up Networking Profile File Transfer Profile Generic Access Profile Generic Object Exchange Profile Handsfree Profile Headset Profile Object Push Profile Personal Area Networking Profile Phonebook Access Profile Serial Port Profile Synchronisation Profile SyncML™ OBEX binding
Core version and supported features	2.1+EDR
Connectable devices	Interoperability and compatibility among Bluetooth™ devices varies. The device generally supports products utilising Bluetooth™ spec. 1.1, or higher, and at least one of the profiles above.

More information:

[www.sonyericsson.com/developer](http://www.sonyericsson.com/developer)

[www.bluetooth.com](http://www.bluetooth.com)

## Java™

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Java™ Platform, Micro Edition	JSR-75 PDA Optional Packages for J2ME™ JSR-82 Bluetooth™ Wireless Technology API JSR-118 MIDP 2.0 JSR-118 MIDP 2.1 JSR-120 Wireless Messaging API JSR-135 Mobile Media API 1.1 JSR-139 CLDC 1.1 JSR-172 J2ME™ Web Services Specification JSR-177 Security and Trust Services API for J2ME™ JSR-179 Location API JSR-180 SIP API for J2ME™ JSR-184 Mobile 3D Graphics API for J2ME™ JSR 185 Java™ Technology for the Wireless Industry JSR-205 Wireless Messaging API 2.0 JSR-211 Content Handler API JSR-226 SVG API for J2ME™ JSR-229 Payment API JSR-234 Advanced Multimedia Supplements JSR-238 Mobile Internationalization API JSR-239 OpenGL® ES JSR-248 Mobile Services Architecture JSR-256 Mobile Sensor API (Accelerometer) Nokia UI Extension API
Java 3D	MascotCapsule® Micro3D Version 3 JSR-239 OpenGL® ES JSR-184 Mobile 3D Graphics API for J2ME™

# Messaging

## (MMS) Multimedia Messaging Service

According to OMA Multimedia Messaging Service v1.2 + SMIL

### Email

Bearer type (IP)	GSM Data (IP) GPRS and HSCSD
Character sets	USASCII UTF-7 UTF-8 UTF-16 UTF-17LE UTF-16BE UCS-2 / ISO10646 UCS2 ISO-8859-1 ISO-8859-2 Eastern Europe ISO-8859-5 Cyrillic ISO-8859-7 Greek ISO-8859-9 Turkish ISO-8859-10 Nordic ISO-8859-11 Thai ISO-8859-15 Western MR5 KOI8 GB18030 Simplified Chinese GB2312 Simplified Chinese BIG5 ISO2022JP Windows® 1251 Cyrillic Windows® 1252 Windows® 1254 Turkish Windows® 1255 Hebrew Windows® 1258 Vietnamese Shift JIS Note: GB2312 is available in Simplified Chinese variants only, that is, Mainland China variants. BIG5 is only available in Traditional Chinese variants, that is, Hong Kong and Taiwan variants.
OTA provisioning solution	OMA Client Provisioning 1.1
Protocols	POP3, SMTP and IMAP4
Push email	IMAP IDLE (extension of IMAP4 Rev1), OMA Email Notification 1.0 and scheduled checking, Microsoft® Exchange ActivSync® (EAS)
Secure email	SSL/TLS, both port methods (POPS/IMAPS) and START-TLS
HTML mail	Yes

More information: [www.sonyericsson.com/developer](http://www.sonyericsson.com/developer), [www.openmobilealliance.org](http://www.openmobilealliance.org)

## Provisioning (OMA CP, OMA DM)

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OMA CP version 1.1

OMA DM version 1.2

Related information:

[www.sonyericsson.com/developer](http://www.sonyericsson.com/developer)

## Synchronisation (OMA DS, EAS)

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OMA Data Synchronisation protocol versions 1.1.2 and 1.2

OMA Data Formats: vCard 2.1, vCalendar 1.0, vBookmark 1.0, notes as text/plain

Microsoft® Exchange ActiveSync® protocol version 2.5

Related information

[www.sonyericsson.com/developer](http://www.sonyericsson.com/developer)

## Multimedia (audio and video)

<b>Audio Playback</b>	<b>Decoder format</b> Audio decoding MPEG-1/2/2.5, audio layer 3 AAC, AAC+, eAAC+  AMR-NB WMA versions 2, 7, 8: Class 1 WMA version 9: Level 3 WMA Pro (profile M0a) General MIDI (GM) GML SP-MIDI DLS (Mobile DLS supported) Linear/A-law/-law PCM iMelody FLAC	<b>Supported in file format</b> MP3 (.mp3)  3GP (.3gp); AAC (.aac); MP4 (.mp4, .m4a) 3GP (.3gp); AMR (.amr) WMA (.wma) WMA (.wma) WMA (.wma) SMF (.mid) SMF (.mid) SMF (.mid); XMF (.xmf, .mxmf) XMF (.xmf) WAV (.wav) iMelody (.imy) FLAC (.flac)
<b>Audio Recording</b>	<b>Encoder format</b> AMR-NB AAC-LC	<b>Supported in file format</b> AMR (.amr) MP4 (.m4a)
<b>Video Playback</b>	<b>Decoder format</b> MPEG-4 Visual Simple Profile H.264 Baseline Profile H.263 Profile 0 VC-1 (WMV9)	<b>Supported in file format</b> 3GP (.3gp); MP4 (.mp4) 3GP (.3gp); MP4 (.mp4) 3GP (.3gp) ASF (.asf, .wmv)
<b>Video Recording</b>	<b>Encoder format</b> - Video: H.263 Profile 0 - Audio: AMR-NB - Video: MPEG-4 Visual Simple Profile - Audio: AAC-LC	<b>Supported in file format</b> 3GP (.3gp)  MP4 (.mp4)
<b>Audio/Video Streaming</b>	Streaming transport	RTSP according to 3GPP™
<b>DRM</b>	DRM (Digital Rights Management) features the rights and copy protection of downloaded content.	OMA DRM 1.0, 2.0, 2.1 Microsoft® DRM Janus

## Web browser

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Browser version	Access NetFront™ 3.5
Bookmarks	Folders and sorting supported
Bookmark export/import	Bookmarks can be sent and received in vBookmark format using Bluetooth™ technology, SMS, MMS and email
Navigation/rendering	Pan & Zoom (page overview model) Landscape/portrait rendering Full page PC rendering
Search	Internet Search Find on page
Browser compliancy	HTML 5.0 Canvas HTML version 4.01 XHTML Basic version 1.0 XHTML version 1.1 XHTML Mobile Profile version 1.1 WML 1.3  CSS 2.1 WCSS Version 26-Oct-2001  ECMA-script 262 3rd edition ECMAScript Mobile Profile 1.0 HTTPXMLRequest AJAX  DOM 2.0 SVG Tiny, version 1.2
Browser plugin	SVG-T Adobe™ Flash Lite™ Audio/Video
Web feeds	Feeds detection in Browser Feeds reader Podcasting
Web albums	Publish to Picasa™ site Publish to a social site Publish to a Blogger™ page Publish to a Flickr™ page
Protocol Compliancy	HTTP/1.1 TLS 1.0 and SSL 3.0 OMA Download 1.0 RSS 2.0

Related information: [www.access-company.com/products/mobile\\_solutions](http://www.access-company.com/products/mobile_solutions)

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